# Education

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Energy Efficiency and Renewable Energy

Hydrogen, Fuel Cells, and Infrastructure Technologies

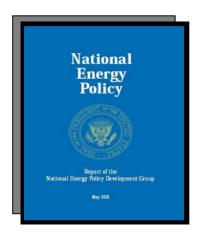
Program

FORS 5G-064

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#### **Education**



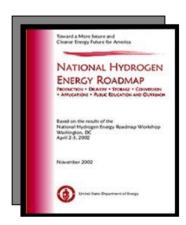
"The NEPD Group recommends that the President direct the Secretary of Energy to develop next-generation technology – including hydrogen...

- Develop an education campaign that communicates the benefits of alternative forms of energy, including hydrogen..."

- National Energy Policy, May 2001

"Educating consumers, industry leaders, and public policy makers about the benefits of hydrogen is critical to achieving the Vision."

- National Hydrogen Energy Roadmap, November 2002



## Challenge

"To talk about the 'hydrogen economy' is to talk about a world that is fundamentally different from the one we know now."

- Secretary Abraham, National Hydrogen Energy Roadmap

That the hydrogen economy is a revolutionary change from the world we know today *is* the fundamental challenge to the education activity

- People are naturally resistant to change
- Perceptions about the safety of hydrogen use compound the resistance to change

#### **Barriers**

- Lack of awareness
- Lack of demonstrations or examples of real-world use
- Institutional barriers and access to audiences
- Regional differences

### **Accomplishments**

• Available materials: fact sheets; Fuel Cells Green Power, Fuel Cells The Energy Revolution, teacher's guide; Hydrogen 2000 videos

- Education workshop, December 2002
- Launched new program web site, January 2003
- Drafted long-range plan for education

#### **Target Audiences and Priorities**

#### **Key Target Audiences**

- Teachers and students
- State and local governments
- Safety and code officials
- Large-scale end-users
- Public

#### **Priority Activities**

- **Information Management** development and effective dissemination of educational materials
- Educational Activities training programs focused on the education needs of key target audiences
- Coalitions and Partnerships coordination with national, state, and local partners to extend the reach and increase the effectiveness of education activities



# **Funding**

Key Activity – Education and Cross-cutting Analysis

• FY03 enacted: \$2.0M

• FY04 request: \$5.8M

## **Major Milestones**

- Establish educational materials library and information clearinghouse/distribution system to serve the immediate needs of multiple audiences, 4Q, 2004
- Conduct public perception analysis and publish report, 4Q, 2004
- Publish codes and standards database (in conjunction with Safety, Codes and Standards program), 3Q, 2005
- Publish safety training materials (in conjunction with Safety, Codes and Standards program), 3Q, 2005
- Launch coordinated materials development and teacher training/professional development program for secondary school teachers, 3Q, 2005

#### **Future Direction**

- Continue to expand web site and educational materials library to serve the needs of multiple audiences
- Work with partners to engage teachers at all levels
- Foster relationships with existing DOE community-based programs to build state and local partnerships that extend the reach of education activities
- Create education review panel to provide continuous feedback and facilitate coordination among "national level" partners
- Build education activities around technology validation projects
- Evaluate public perceptions of hydrogen technology and plan public education campaign